ABSTRACT

The present inventors have found that certain preparations containing LPS and/or lipid A variants, derivatives, and/or analogs demonstrate non-pyrogenic properties and exhibit anti-viral activities. In particular, non-pyrogenic preparations of LPS, lipid A, LPS antagonists and lipid A antagonists, and derivatives thereof induce β chemokine secretion, such as MIP-1β, but not proinflammatory cytokines, such as TNFα, IL-1β and IL-6. Non-pyrogenic preparations of the invention have been demonstrated by the Applicant to suppress HIV replication in human peripheral blood monocytes, as described by way of example herein. The present invention provides preparations of LPS or lipid A variants, analogs and derivatives of decreased or absent pyrogenicity which can be used as therapeutics for the treatment or prevention of immunodeficiency virus infection and its consequences.